

Ser. No. 10/733,606

Amendments to the Specification

Please amend the title to read: VESSEL CLEANING APPARATUS WITH INSPECTION CAMERA.

Please amend the first full paragraph of page 8, presently numbered [0027], as follows:

[0027] In various implementations, internal surface enhancements may substantially increase internal surface area beyond that provided by the nominally cylindrical and frustoconical segment interior surfaces. The enhancement may be effective to assist in the deflagration-to-detonation transition or in the maintenance of the detonation wave. FIG. 4 shows internal surface enhancements applied to the interior of one of the main segments 60. The exemplary enhancement is nominally a Chin spiral, although other enhancements such as Shchelkin spirals and Smirnov cavities may be utilized. The spiral is formed by a helical member 120. The exemplary member 120 is formed as a circular-sectioned metallic element (e.g., stainless steel wire) of approximately 8-20mm in sectional diameter. Other sections may alternatively be used. The exemplary member 120 is held spaced-apart from the segment interior surface by a plurality of longitudinal elements 122 (see also FIG. 5). The exemplary longitudinal elements are rods of similar section and material to the member 120 and welded thereto and to the interior surface of the associated segment 60. Such enhancements may also be utilized to provide predetonation in lieu of or in addition to the foregoing techniques involving different charges and different combustor cross-sections.

Please amend the Abstract as follows:

ABSTRACT

An apparatus for cleaning a surface within a vessel having a vessel wall separating a vessel exterior from a vessel interior and having a wall aperture, an inspection camera may be used in conjunction with a shockwave cleaning apparatus. The camera has a head held in an operative position within a vessel interior. A light source has at least a light emitting element carried by the head. At least an incident lens of the camera is carried by the head so as to capture light from the source as returned by a surface within the vessel interior.